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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,118	01/31/2001	Peter M. Maddocks	10004943-1	5383

7590 01/04/2007 HEWLETT-PACKARD COMPANY Intellectual Property Administration P. O. Box 272400 Fort Collins, CO 80527-2400		EXAMINER
		KANG, INSUN

ART UNIT	PAPER NUMBER
2193	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<table>
<tr><td colspan="2" rowspan="2">Office Action Summary</td><td>Application No.
09/773,118</td><td>Applicant(s)
MADDOCKS ET AL.</td></tr>
<tr><td>Examiner
Insun Kang</td><td>Art Unit
2193</td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>10/13/2006.</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1,2,5-15,19-22,34,35,39,41,42,44 and 46-56</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1, 2, 5-15, 19-22, 34, 35, 39, 41, 42, 44, and 46-56</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This action is in response to the Appeal Brief filed 10/13/2006.

2.   In view of the appeal brief filed on 10/13/2006, prosecution is hereby reopened.
New grounds of rejection are introduced below. To avoid abandonment of the
application, appellant must exercise one of the following two options:

(1)   file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply
under 37 CFR 1.113 (if this Office action is final); or, (2) request reinstatement of the
appeal. If reinstatement of the appeal is requested, such request must be accompanied
by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130,
1.131 or 1.132) or other evidence are permitted.

The previous office action has been withdrawn.   Claims 1, 2, 5-15, 19-22, 34, 35,
39, 41, 42, 44, and 46-56 are pending in the application.

Double Patenting

3.   The nonstatutory double patenting rejection is based on a judicially created doctrine
grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or
improper timewise extension of the "right to exclude" granted by a patent and to prevent possible
harassment by multiple assignees. See *In re Goodman,* 11 F.3d 1046, 29 USPQ2d 2010 (Fed.
Cir. 1993); *In re Longi,* 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum,* 686
F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel,* 422 F.2d 438, 164 USPQ 619 (CCPA
1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).
        A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to
overcome an actual or provisional rejection based on a nonstatutory double patenting ground
provided the conflicting application or patent is shown to be commonly owned with this
application. See 37 CFR 1.130(b).
        Effective January 1, 1994, a registered attorney or agent of record may sign a terminal
disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR
3.73(b).

4.   Claims 1, 2, 5-15, 19-22, 34, 35, 39, 41, 42, 44, and 46-56 are rejected on the

ground of nonstatutory obviousness-type double patenting as being unpatentable over

claims 1-20 of U.S. Patent No. 6,724,409 in view of Weinberg et al. (US Patent

6,587,969) hereinafter referred to as "Weinberg."

Although the conflicting claims are not identical, they are not patentably distinct

from each other because they are directed to substantially the same invention and

recites only obvious differences which would have been obvious to one of ordinary skill

in the art of program development at the time of invention such as simply (i)

omitting/adding steps or elements along with their functions, and/or (ii) implementing the

method steps with means for performing the steps, and/or (iii) computer program

implementation of the method, and/or (iv) implementing an apparatus having computer

program for performing the method steps.

The following example is given:

Per claim 1:

Patent '409 recites :

An apparatus for providing a graphical user interface (GUI) comprising: a graphical

user interface (GUI) comprising: logic configured to execute GUI generation code and

GUI user interaction handling code ("An apparatus for generating a tree-based

graphical user interface (GUI), the apparatus for generating the tree-based GUI

capable of being used to create or edit machine control sequences, the apparatus

comprising: a computer, the computer being programmed to execute GUI generation

code and GUI user interaction handling code," claim 1)

and a display device in communication with said logic ("a display device in communication with the computer, wherein when the computer executes the GUI generation code, an item list and a tree structure are simultaneously displayed on the display device," claim 1)

wherein execution of the GUI generation code by said logic causes a first window, said first window presenting a first panel configured to present plural devices and associated commands of a sequence as a hierarchical tree structure, each of the devices in the sequence being at a different hierarchical level than a hierarchical level of one or more commands associated with the device, the first window presenting a second panel configured to present one or more available commands and devices for adding commands and devices to the sequence ("the tree structure comprising a machine control sequence comprised of at least one step, wherein each step includes at least one device to be utilized in the step, the at least one device hierarchically differentiated within the tree structure from the at least one step, and at least one command to be executed in the step, the at least one command hierarchically differentiated within the tree structure from the at least one step and the at least one device, the item list displaying commands that can be added to the tree structure," claim 1).

Patent '409 does not explicitly recite a second window presenting results of execution of the sequence. However, Weinberg teaches that it was known in the pertinent art, at the time applicant's invention was made, to view the execution results in a second window (see fig. 3A, 4A, and 5F). It would have been obvious for one

having ordinary skill in the art to modify Patent '409's system to incorporate the

teachings of Weinberg.   The modification would be obvious because one having

ordinary skill in the art would be motivated to view the execution result of the sequence

as thought by Weinberg (See the displayed Execution Log window in Fig 3A, 4A, and

5F; "FIG. 5F illustrates the execution summary that is provided in a web-based

implementation of the testing tool. The execution summary includes a tree

representation ... or "report tree" of the test execution in the left pane of the screen,"

col 17, lines 1-45; see also col 3, lines 11-44; col 11 lines 33-50).

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 1-22, 39, and 41-52 under 35 U.S.C. 103(a) as being unpatentable over

Blowers et al. (US Patent 6,724,409) hereinafter referred to as "Blowers" in view of Hall

(Swing Tutorial: JTree, 1999).

As per claim 1:

Blowers discloses:

- a graphical user interface (GUI) comprising: logic configured to execute GUI

generation code and GUI user interaction handling code; and a display device in

communication with said logic (i.e. "Graphical representations of possible hardware and

possible machine vision tasks are displayed. Commands are received from a user to

select desired hardware operating parameters corresponding to desired hardware and a

machine vision graphical representation and its associated first control program

corresponding to a desired machine vision task," abstract)

-wherein execution of the GUI generation code by said logic causes a first window and

a second window to be displayed on the display device, said first window presenting a

first panel configured to present a device and associated commands of a sequence as

a hierarchical tree structure, each of the devices in the sequence being at a different

hierarchical level than a hierarchical level of one or more commands associated with the

device (i.e. developing a graphical, control-flow structure such as a tree

structure...further includes the step of displaying graphical representations of possible

hardware and possible machine vision tasks...receiving commands from a user to

select desired hardware operating parameters corresponding to desired hardware and a

machine vision graphical representation and its associated first control program

corresponding to a desired machine vision task. The method includes displaying the

structure. The selected machine vision graphical representation is a node. The first

control program is linked into the structure," col. 3 lines 15-21; 25-35).

Blowers does not explicitly teach presenting plural devices. However, Hall

teaches manipulating and displaying hierarchical data by using a Swing component,

JTree was known in the pertinent art, at the time applicant's invention was made, to

collapse or expand the various tree nodes in the hierarchy (Hall, i.e. 5.2. Replacing the

icons: result figure).   It would have been obvious for one having ordinary skill in the art

to modify Blowers' disclosed system to incorporate the teachings of Hall. The

modification would be obvious because one having ordinary skill in the art would be

motivated to display various nodes of devices simply by expanding the nodes in JTree

as suggested by Hall.

Blowers further discloses: the first window presenting a second panel configured

to present one or more available commands and devices for adding commands and

devices to the sequence, and said second window presenting results of execution of the

sequence (i.e. "The task sequence generation window illustrated in Figs 7-9" and results

window of Fig. 9 through a results interface 60) as claimed.

As per claim 2, the rejection of claim 1 is incorporated.   Blowers further discloses

that said first and second panels are simultaneously and fully viewable by a user (i.e.

col. 9 lines 1-6) as claimed.

As per claim 5, the rejection of claim 1 is incorporated.   Blowers further discloses:

each of the commands comprises an argument (i.e. col. 9 lines 1-6; "The task

sequence generation window illustrated in Figs 7-9" and results window of Fig. 9

through a results interface 60) as claimed.

As per claim 6, the rejection of claim 1 is incorporated. Blowers further discloses

that said presented results include a start time and an end time associated with

execution of each command (i.e. col. 9 lines 16-25) as claimed.

As per claim 7, the rejection of claim 1 is incorporated. Blowers further discloses that said presented results include information defining an iteration associated with a displayed command (i.e. col. 9 lines 16-25) as claimed.

As per claim 8, the rejection of claim 1 is incorporated. Blowers further discloses that said presented results include a step associated with a displayed command (i.e. col. 9 lines 7-25) as claimed.

As per claim 9, the rejection of claim 1 is incorporated. Blowers further discloses that said presented results include a device associated with a displayed command (i.e. col. 9 lines 7-25) as claimed.

As per claim 10, the rejection of claim 1 is incorporated. Blowers further discloses that presented results include information indicating whether or not the displayed command was successfully executed (i.e. col. 9 lines 7-25) as claimed.

As per claim 11, the rejection of claim 1 is incorporated. Blowers further discloses that said second window displays a unique iteration number identifier for each of said one or more iterations of the sequence, each said iteration number identifiers uniquely identifying a particular iteration of said sequence, and wherein when a user selects one of said unique iteration number identifiers, information describing each command executed during the iteration associated with the selected iteration number identifier is displayed on said display device (i.e. col. 9 lines 7-25) as claimed.

As per claim 12, the rejection of claim 11 is incorporated. Blowers further discloses: a start time and an end time associated with execution of each command that was executed during the iteration associated with the selected iteration number

identifier; information identifying the iteration associated with the each command ;a

step associated with each command; a device associated with each command;

information indicating whether the displayed command was successfully executed (i.e.

col. 9 lines 7-25) as claimed.

As per claim 13, the rejection of claim 1 is incorporated. Blowers further discloses

that the GUI generation code and the GUI user interaction handling code are written in

an object-oriented, platform-independent language (i.e. col. 6 lines 15-22) as claimed.

As per claims 14-15, 19-22, they are the method versions of claims 1, 2, 5-10,

respectively, and are rejected for the same reasons set forth in connection with the

rejection of claims 1, 2, 5-10 above.

Per claim 39:

The rejection of claim 1 is incorporated. Blowers further discloses:

Execution of the sequence of commands causes communication with the devices

identified by the sequence (i.e. col. 9 lines 7-25) as claimed.

Per claim 41:

The rejection of claim 1 is incorporated. Blowers further discloses:

A memory to store a file containing the results of the execution of the sequence,

wherein the second window presents the results of the execution of the sequence in

response to selection of a displayed option that enables opening of the file (i.e. col. 9

lines 7-25) as claimed.

Per claim 42:

The rejection of claim 1 is incorporated. Blowers further discloses:

-the execution of sequence causes testing of the devices identified in the sequence

argument (i.e. col. 9 lines 1-6; "The task sequence generation window illustrated in Figs

7-9" and results window of Fig. 9 through a results interface 60) as claimed.

Per claim 44:

The rejection of claim 14 is incorporated. Blowers further discloses:

-storing the results of execution of sequence in a file, and in response to receiving user

activation of a displayed option, open the file to enable displaying the results in the

second window argument (i.e. col. 9 lines 1-6; "The task sequence generation window

illustrated in Figs 7-9" and results window of Fig. 9 through a results interface 60; col 9

lines 1-7) as claimed.

As per claims 46, 47, and 49-52, these are the computer program versions of

claims 5-11 and 42, respectively, and are rejected for the same reasons set forth in

connection with the rejection of claims 5-11 and 42 above.

Per claim 48:

The rejection of claim 46 is incorporated. Blowers further discloses:

The program when executed causes the computer to remove at least one of a step,

device, and command from the sequence in response to selection of a displayed third

option (see Fig 7-9, edit option) as claimed.

Per claim 53:

The rejection of claim 1 is incorporated. Blowers further discloses:

wherein the first panel is configured to further present

at least a step of the sequence, the step including at least one of the devices and the

one or more

commands associated with the at least one device, wherein the step is at a hierarchical

level that

is different from the at least one device.

Per claim 54:

The rejection of claim 14 is incorporated. Blowers further discloses:

displaying the sequence comprises displaying the sequence as a hierarchical tree

structure, each of the devices in the sequence being at a different hierarchical level of

the hierarchical tree structure than a hierarchical level of one or more commands

associated with the device (i.e. col. 9 lines 1-6; "The task sequence generation window

illustrated in Figs 7-9" and results window of Fig. 9 through a results interface 60; col 9

lines 1-7) as claimed.

Per claim 55:

The rejection of claim 14 is incorporated. Blowers further discloses:

wherein the sequence further comprises at least one step that includes at least one

device and one or more commands associated with the at least one device, and

wherein displaying the sequence comprises displaying the sequence as a hierarchical

tree structure, the at least one step, the at least one device, and the associated one or

more commands being at different hierarchical levels in the tree structure (i.e. col. 9

lines 1-6; "The task sequence generation window illustrated in Figs 7-9" and results

window of Fig. 9 through a results interface 60; col 9 lines 1-7) as claimed.

Per claim 56:

The rejection of claim 46 is incorporated. Blowers further discloses:

wherein the sequence is displayed as a hierarchical tree structure containing the steps,

devices, and commands, each step at a hierarchical level different from the respective

hierarchical levels of the devices and commands included in the corresponding step (i.e.

col. 9 lines 1-6; "The task sequence generation window illustrated in Figs 7-9" and

results window of Fig. 9 through a results interface 60; col. 9 lines 1-7) as claimed.

7.   Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Blowers et al. (US Patent 6,724,409) hereinafter referred to as "Blowers," in view of

in view of Hall (Swing Tutorial: JTree, 1999), and further in view of Weinberg et al. (US

Patent 6,587,969) hereinafter referred to as "Weinberg."

Per claim 34:

Blowers discloses:

-a processor configured to execute logic configured to generate a graphical user

interface (GUI),logic configured to interact with at least one human to machine interface,

and logic configured to generate commands applied to control systems within one or

more remote devices (i.e. "Graphical representations of possible hardware and possible

machine vision tasks are displayed. Commands are received from a user to select

desired hardware operating parameters corresponding to desired hardware and a

machine vision graphical representation and its associated first control program

corresponding to a desired machine vision task," abstract)

-a display device in communication with said processor, wherein when said

processor executes the logic configured to generate the GUI, a first window is

displayed on the display device that displays both a sequence in a first portion of the

first window and a list of one or more commands in a second portion of the first window,

the displayed sequence being in a hierarchical tree structure in which a device and ·

associated commands are at different hierarchical levels (i.e. "developing a graphical,

control-flow structure such as a tree structure...further includes the step of displaying

graphical representations of possible hardware and possible machine vision

tasks...receiving commands from a user to select desired hardware operating

parameters corresponding to desired hardware and a machine vision graphical

representation and its associated first control program corresponding to a desired

machine vision task. The method includes displaying the structure. The selected

machine vision graphical representation is a node. The first control program is linked

into the structure," col. 3 lines 15-21; 25-35) wherein said first window presents an

option, the selection of which executes the sequence (i.e. "The task sequence

generation window illustrated in Figs 7-9" and results window of Fig. 9 through a results

interface 60).

Blowers does not explicitly teach presenting plural devices. However, Hall

teaches manipulating and displaying hierarchical data by using a Swing component,

JTree was known in the pertinent art, at the time applicant's invention was made, to collapse or expand the various tree nodes in the hierarchy (Hall, i.e. 5.2. Replacing the icons: result figure).   It would have been obvious for one having ordinary skill in the art to modify Blowers' disclosed system to incorporate the teachings of Hall. The modification would be obvious because one having ordinary skill in the art would be motivated to display various nodes of devices simply by expanding the nodes in JTree as suggested by Hall.

Blowers discloses when a second option is selected, the display device displays a second window displaying data regarding execution of the sequence, (i.e. "The task sequence generation window illustrated in Figs 7-9" and results window of Fig. 9 through a results interface 60). Blowser does not explicitly disclose that the data regarding the execution of the sequence is a summary of information. However, Weinberg teaches that it was known in the art of software development and testing, at the time applicant's invention was made, to view the overall execution results without details. It would have been obvious for one having ordinary skill in the art of computer software development and distribution to modify the tree-based GUI testing system of Blowers to include summary information of the execution.   The modification would be obvious because one having ordinary skill in the art would be motivated to view the overall information resulting from the execution as thought by Weinberg (See the displayed Execution Log window in Fig 3A, 4A, and 5F; "FIG. 5F illustrates the execution summary that is provided in a web-based implementation of the testing tool. The execution summary includes a tree representation ... or "report tree" of the test

execution in the left pane of the screen," col 17, lines 1-45; see also col 3, lines 11-44;

col 11 lines 33-50).

Per claim 35:

The rejection of claim 34 is incorporated.   Blowers further teaches that the one or more

remote devices comprise devices configured to house and manipulate data storage

media (i.e. col. 7 lines 9-25) as claimed.

Response to Arguments

8.   Applicant's arguments with respect to claims 1, 2, 5-15, 19-22, 34, 35, 39, 41, 42,

44, and 46-56 have been considered but are moot in view of the new ground(s) of

rejection.

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Insun Kang whose telephone number is 571-272-3724.

The examiner can normally be reached on M-R 6:30-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, MENG AI AN can be reached on 571-272-3756. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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ANIL KHATRI
PRIMARY EXAMINER